

Revised 5/04

ENVIRONMENTAL STUDY

Project Name: SR-92; East of I-15 in Lehi, Utah County

Project No. 98235

PIN: 4600

Date: 22 December 2004

Job/Proj.: SP-0092(5)1

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For guidance in preparing this environmental study, refer to Chapter 4 of the UDOT Environmental Process Manual of Instruction:

<http://www.udot.utah.gov/esd/manuals/environmental/EnvironmentalManual.htm>

REQUIRED SIGNATURES

I have reviewed the information presented in this Environmental Study and I hereby attest that the document is complete and the details of the document are correct.

Reviewers Signature

Date: _____

FEDERAL AID PROJECTS

As a result of this Environmental Study, UDOT finds that this project will NOT cause significant environmental impacts and qualifies as a Categorical Exclusion Level III, under paragraph 1 , according to the agreement between UDOT and FHWA for Environmental Approval Authority for selected Categorical Exclusion documents.

For CE Level II Projects:

Approved: _____ Date: _____
UDOT Region Environmental

For CE Level III Projects:

Review/Concur: _____ Date: _____
UDOT Region Environmental

For CE Level III Projects:

Approved: _____ Date: _____
FHWA, Utah Division

I. Purpose and Need for Action

SR-92 from Interstate 15 easterly to American Fork Canyon serves the cities of Lehi, Highland and Alpine. It also serves those traveling into the canyon and the recreational opportunities located there. The roadway consists of two 12 foot lanes, one in each direction, with 4 to 6 foot shoulders. The roadway has grades ranging from 3 to 5 percent on the western end, near I-15. SR-92 is shown as a five lane facility on the MAG long range plan. Average daily traffic on the western portion of SR-92 is presently about 24,000 vehicles. In the traffic mix, there are many commercial vehicles that travel from nearby gravel pits and other commercial facilities to developments to the east. These fully loaded trucks are slow because of the upgrade which causes congestion for eastbound traffic. UDOT proposed to address this problem by adding an eastbound climbing lane from I-15 to the top of the grade near the Murdock canal. This was scheduled as a state funded spot project in the summer of 2005.

Presently, there is growing development along SR-92 near I-15. A large mixed use development on the north side of SR-92, called Traverse Mountain, is being built (see figure 1 for location with respect to SR-92 and figure 1A for phase 1 of the development). Approximately 200 homes have been built to date and are occupied. This development will have about 8000 homes at build out (see figure 1B), which is expected in 2015. The commercial portion of the development is underway, most notably with a Cabelas retail outlet being constructed and scheduled for completion in the summer of 2005. Ingress and Egress into the development will be via the frontage road, Triumph Blvd and Traverse Mountain Blvd. As part of the access permit to Traverse Mountain, UDOT required the developer to provide the standard taper requirements for acceleration and deceleration lanes at these access points. Because the access points are so close together, the tapers overlapped, creating essentially an auxiliary lane in the westbound direction.

A traffic study performed by the developer (A-Trans Engineering report - November 2004) shows that by the year 2010 (phase one of the development) the ADT on SR-92 generated only by the development will be 42,000. This is in addition to the vehicles on SR-92 which was counted at 24,000 in 2004. By the end of phase 2 of the build out, in 2015 to 2020, the traffic generated only by the development will be 75,800. Again, this will be in addition to traffic travelling to points further east than this development.

The report modeled SR-92 as a five lane section through phase 1 (2010) and the SB off ramp as a dual lane ramp. The LOS for the various intersections for the AM and PM peaks are shown in Table 1. In summary, most of the intersections will operate at a LOS C, with the exception of the SB off ramp, which will operate at LOS F during the PM peak hour. At the end of phase 2, the intersections with I-15 and the frontage road will operate at LOS F. Additional interchange improvements will need to be looked at in the future.

The Traverse Mountain developer wishes to relocate the north frontage road outlet easterly about 500 feet to take maximum advantage of the property development. This will also necessitate relocating the existing park-n-ride lot on the frontage road to in between the SB off ramp and the existing west frontage road. These relocations are at the developers expense, but since these actions are interrelated, UDOT has included them in this environmental document. Figure 2 shows the plan view of the project area.

II. Description

Provide a written description, including project length. Attach appropriate map(s) and typical section(s) showing proposed project.

SR-92, is proposed to be widened to four 12 foot lanes, a 14 median and 8 foot shoulders for approximately 1 1/4 miles, as shown in Figure 3. This is the standard UDOT 5 lane section. The main differences between the proposed section and what would have been built under permits is that the median is continuous, rather than just at the intersections for left turning vehicles, and the shoulders are 8 foot instead of 4 foot. This would have been a less than desirable cross section for safety purposes. Traffic signals will be constructed at the relocated frontage road, Triumph Blvd. and Traverse Mountain Blvd as they are now warranted, based on traffic volumes. The developer is providing the ROW for the north side of SR-92. UDOT will be obtaining ROW on the south side and the developer will also be deeding some of the ROW needed on the south side (see the ROW section for amounts).

Another 12 foot lane will be added to the SB off ramp. The lane will be added toward the interstate. Near the bottom, or end of the ramp at SR-92 a third lane will be added (see figure 3A).

The developer has requested that the northbound frontage road intersection with SR-92, east of I-15, be relocated about 500 feet further to the east. The frontage road realignment is shown in Figure 4. All of this work will be performed by the developer using plans approved by UDOT. There will be an acre for acre land swap with the developer for the frontage road.

The developer will also relocate the existing park-n-ride lot on the east frontage road, north of SR-92 to the west frontage road, north of SR-92, as shown in Figure 5. This lot will be relocated on existing UDOT ROW. The new lot will be bus friendly (the existing wasn't) and UDOT has contacted UTA about modifying their bus route to take advantage of customers that may come from the park-n-ride lot. UTA plans to modify a route to use the lot.

III. Roadway Function Classification

Yes	The facility is classified as a Major Rural Collector or higher. This is required to be eligible for federal funding.
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IV. Public Hearing/Opportunity for Public Hearing

Yes	This project will add additional through traffic lanes or substantially change the layout or function of itself or connecting roadways, including access limitations.
No	This project has a substantial adverse impact on abutting property.
No	There are significant social, economic, environmental or other effects. (If YES, a Categorical Exclusion is not applicable.)
No	FHWA has determined that a public hearing is in the public interest.

If the answer to ANY of the above questions is YES, a public hearing or opportunity for a public hearing is required (attach documentation identifying date and location of hearing, summary of comments, and responses to substantial comments or include certification of opportunity for hearing).

What types of public involvement have been provided? Check the appropriate line(s) below: Attach a brief description of the event held, comments and responses to comments.

- ☐ Public Hearing in accordance with state and federal procedures
- ☐ Opportunity for Public Hearing Advertised
- ☒ Open House
- ☐ Neighborhood Meeting
- ☐ Agency Meeting
- ☐ Other: An open house was conducted Lehi in the summer of 2004 for an earlier study. The public was in favor of widening SR-92.

V. Right-of-way

Yes Acquisition of right-of-way is required.

For projects that require right-of-way:

No The right-of-way required is significant because of its: size, location, use, or relationship to remaining property and abutting properties. If the right-of-way required is significant, the project **does not** qualify as a Categorical Exclusion.

No. of parcels affected 2

No. of acres required 0.33 Additionally, a total of 8.5 acres will be deeded to UDOT by the developer.

VI. Cultural

Yes The project has the potential to cause effects on historic properties. If YES, continue below.

No The project meets the conditions of the MOU with SHPO for state-funded minor highway improvement projects. If YES, a memo is attached from the UDOT Region NEPA/NHPA Specialist granting cultural clearance. If YES Cultural Coordination is complete. If NO, continue below.

☒ SHPO concurrence with the Determination of Eligibility and Finding of Effect is attached. Where applicable, Advisory Council concurrence and an executed Memorandum of Agreement are attached. Mitigation commitments are attached if applicable. (Note: All consultation must be submitted through UDOT).

Native American Consultation (required for every project that has the potential to cause effects on historic properties):

- Yes Letters for Native American consultation have been sent and follow-up calls have been made. See attached letters and responses from tribes if applicable. If NO, provide an explanation
- No Impacts to historic properties of concern to Native American Tribes require mitigation or avoidance.

For Projects That Have an Adverse Effect on Historic Properties:

- ☐ A formal public notice has been published in area newspapers.

VII. Paleontological

- No The project may affect paleontological resources.
- If YES, State Paleontologist concurrence with the Finding of Effect and the monitoring and/or mitigation measures are attached.
- ☒ If NO, either the project has no potential to affect the resource, or it meets the paleontological MOU conditions. A clearance memo from the UDOT Region NEPA/NHPA Specialist is attached.

VIII. Rare, Threatened or Endangered Species

- ☒ Concurrence letter from USFWS or the UDOT Wildlife Program Manager is attached. (Note: Letters should be less than 1 year old from date of issue or they need to be updated by issuing agency.)

IX. Wildlife

The following types of projects do not typically affect wildlife or habitat: installation of traffic signals, lighting, signs & pavement markings, rotomill & overlays, pavement rehabilitation, grinding & resurfacing, deck repair, installation of curb, gutter & sidewalk and minor intersection improvements

- No Does the project have potential to affect wildlife, habitat, big game migration routes, fish passage or habitat connectivity?

- No Does the project have potential to affect State Sensitive Species?

If either answer is yes, attach consultation letter from either the UDOT Wildlife Program Manager or the State Division of Wildlife Resources.
On the eastern end of the project there may be some wildlife crossing, but as the development progresses these animals will relocate.

X. Invasive Species

If the project involves earthwork, grading or landscaping, there is potential to introduce or spread invasive weed species.

- Yes This project has the potential to introduce or spread invasive species included on the noxious weed list of the State of Utah and the county noxious weed lists based on project location.
- ☒ If YES, Best Management Practices (BMP's) will be implemented to minimize the spread of invasive species. These BMP's are listed in the mitigation section and should be included in the project specifications.

XI. Noise

Projects that may affect noise levels to adjacent receptors include changes in roadway alignment, roadway widening and the addition of traffic lanes.

- No This project has the potential to increase noise to adjacent receptors. If YES, a noise study is attached.

XII. Water Pollution, Wetlands, Floodplains, Stream Encroachments

- Yes This project MAY affect wetlands, floodplains, water quality, or may encroach on a natural stream channel.

If YES, coordinate with UDOT Region Hydraulics Engineer and Region Wetland Specialist. Attach appropriate mitigation commitments and permit requirements.

There are no wetlands in the project area. There are no floodplains in the project area. Since SR-92 is being widened, the amount of roadway drainage will at least double. On the relocated frontage road, roadway drainage will be collected by inlets. This will be the same condition at the relocated park-n-ride lot. Two channels cross SR-92 within the project area, the Murdock Canal and the Bull Run ditch. The Murdock Canal will be covered in the near future (an EA/FONSI has been issued on this work). Some of the roadway drainage may enter the Bull Run Ditch.

XIII. Hazardous Waste

- No A visual inspection of the project area found substances that may be hazardous to human health and/or the environment.

- Yes This project involves excavation beyond or below the existing roadway footprint.

If YES is checked on either line:

Site investigations and coordination with DEQ may be necessary.

Mitigation commitments are attached if applicable.

No past or present features indicated that hazardous materials have been present in the project area.

XIV. Prime, Unique, Statewide, or Local Important Farmland

Projects in areas whose land use maps indicate no current or future farming activities, would not usually affect farmlands.

No This project MAY affect Prime, Unique, Statewide, or Local Important Farmlands.

If YES, the Natural Resource Conservation Service letter and Form AD1006 are attached. (Note: Letters should be less than 1 year old from date of issue or they need to be updated by issuing agency.)

XV. Air Quality

Yes The project adds or alters roadway capacity or will result in increased traffic volumes (addition of through traffic lanes or intersection/signal improvements.

If YES, attach the "Air Quality Supplement".

Air Quality Construction Impacts:

Yes The project has the potential to increase particulate matter due to construction activities. If YES, Best Management Practices to minimize fugitive dust will be incorporated on the project in accordance with DAQ (Division of Air Quality) procedures.

XVI. Relocations

No There MAY be relocations of residences or businesses as a result of this project. If YES, explanatory material is attached.

XVII. Land Use / Urban Policy

No This project MAY affect land use or urban policy. If YES, explanatory material is attached.
Development is already planned and occurring in the area.

XVIII. Section 4(f) or Section 6(f) Properties - For Federal Aid Projects Only

No There is Section 4(f) or 6(f) involvement.

☐ A Programmatic Section 4(f) Evaluation is included.

☐ An Individual Section 4(f) Evaluation is attached. If 6(f) properties are involved, they will be addressed in the Section 4(f) Evaluation.

XIX. Other Environmental Factors Considered

This project, except as noted and explained in attachments, will have no disproportionate, serious or lasting effect on the following:

☒ Visual

- ☒ Social/Economic
- ☒ Title VI and/or Environmental Justice
- ☒ Natural Resources
- ☒ Construction
- ☒ Energy
- ☒ Geology/Soils
- ☒ Wild/Scenic Rivers
- ☒ Ecology

XX. Mitigation

- Yes Mitigation commitments are required. If YES, a list of all commitments is attached.
1. Include BMPs for Invasive Species
 2. Include BMPs for dust control
 3. Include grassy swales and check dams on SR-92 to slow drainage to allow water quality improvements.
 4. Include oil/water separators on the inlets on the relocated frontage road and relocated park-n-ride lot.
 5. Place small sediment traps/detention basins within the existing ROW just prior to allowing water to enter the Murdock Canal (until it is covered) and the Bull Run Ditch.
 6. Place appropriate erosion control devices during construction.
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XXI. Conclusion

- No The project may have substantial controversy or significant impacts. If YES, a Categorical Exclusion is not applicable.